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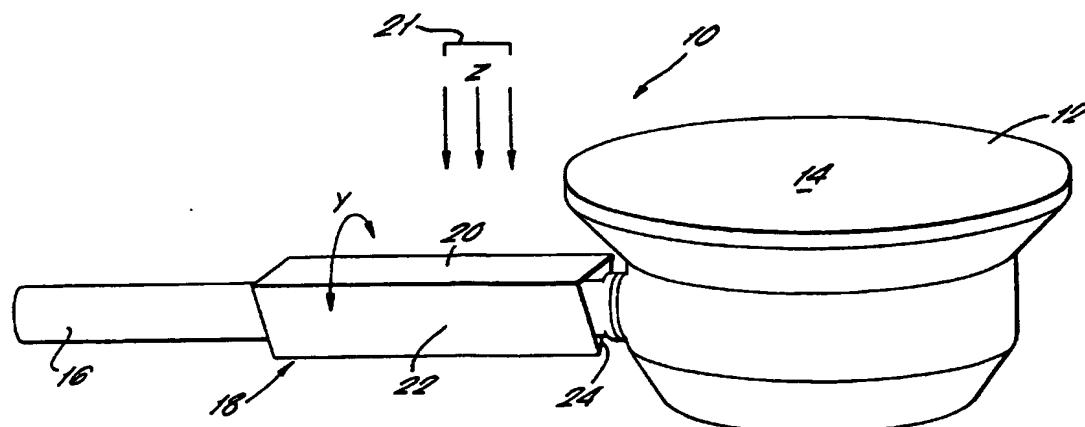
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(54) Title: METHOD AND APPARATUS FOR REDUCING CROSS CONTAMINATION OF SPECIES DURING ION IMPLANTATION



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(57) Abstract: A wafer support for an ion implanter includes a wafer holder and a support arm for the holder in the implant chamber. A portion of the support arm adjacent the wafer holder is at least intermittently exposed to the ion beam during implantation, as a result of the relative scanning of the ion beam and the wafer holder. An arm shield mechanism has a plurality of shielding surfaces which can be selectively disposed to receive the ion beam to protect the exposed portion of the support arm. The shielding surfaces may form a sleeve arranged over the arm which may be rotatable above the arm to present selected surfaces to the ion beam. Cross contamination when successively implanting different species can be reduced by presenting different shield surfaces to the beam.

# INTERNATIONAL SEARCH REPORT

Int'l Application No  
PCT/EP 03/02812

A. CLASSIFICATION OF SUBJECT MATTER  
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B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H01J H01L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 407 985 A (APPLIED MATERIALS INC) 16 January 1991 (1991-01-16) cited in the application column 2, line 55 – column 4, line 40; figures	10,13
A	WO 01/013410 A (CORDTS BERNHARD F III ; IBIS TECHNOLOGY INC (US); BLAKE JULIAN G (US);) 22 February 2001 (2001-02-22) page 11, line 8 – page 12, line 2; figure 15	1,10,13

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

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Information on patent family members

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